

10/535503

(12) INTERNATIONAL APPLICATION PUBLISHED UNDER THE PATENT COOPERATION TREATY (PCT)

(19) World Intellectual Property Organization International Bureau



(43) International Publication Date
3 June 2004 (03.06.2004)

PCT

(10) International Publication Number
WO 2004/045878 A3

(51) International Patent Classification⁷: B60Q 1/00, 1/26

(21) International Application Number:
PCT/US2003/037196

(22) International Filing Date:
19 November 2003 (19.11.2003)

(25) Filing Language: English

(26) Publication Language: English

(30) Priority Data:
60/427,760 20 November 2002 (20.11.2002) US

(71) Applicant (for all designated States except US): JOHNSON CONTROLS TECHNOLOGY COMPANY [US/US]; 650 Waverly, Holland, MI 49423 (US).

(72) Inventors; and

(75) Inventors/Applicants (for US only): BARKER, Daniel,

L. [US/US]; 5744 18th Avenue, Hudsonville, MI 49426 (US). CICHOLSKI, Steven, J. [US/US]; 1066 E. 12th Street, Holland, MI 49423 (US). RUITER, Andrew, K. [US/US]; 13137 Acacia Drive, Grand Haven, MI 49417 (US). BAAS, James, H. [US/US]; 997 Kenwood Drive, Holland, MI 49423 (US). STENMAN, Robert, J. [US/US]; 3490 Wkama Way, Saugatuck, MI 49453 (US). FOX, Mathias, R. [US/US]; 4563 Majestic Vue, Zeeland, MI 49464 (US). KREUZE, Kenneth, D. [US/US]; A-4920 146th Avenue, Holland, MI 49423 (US).

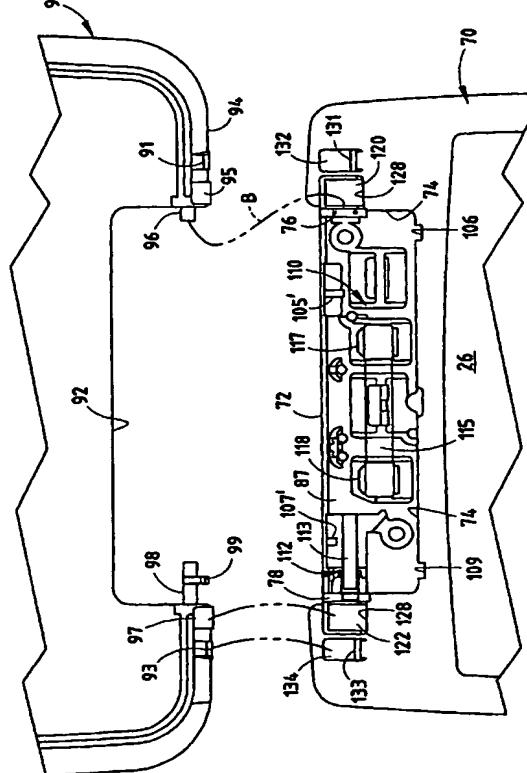
(74) Agent: REICK, Harold, W.; Price, Heneveld, Cooper, DeWitt & Litton, LLP, 695 Kenmoor, S.E., P.O. Box 2567, Grand Rapids, MI 49501-2567 (US).

(81) Designated States (national): AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, EG, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK,

[Continued on next page]

(54) Title: COVERED ILLUMINATED VANTY MIRROR ASSEMBLY

(57) Abstract: A vanity mirror frame (70) has insert-molded electrical contacts (117, 118) for holding a lamp in place in the frame and which, when assembled to a visor core, makes aligned electrical connections with the visor core electrical supply. Further, the vanity mirror frame includes a unique socket (78) for pivotally receiving and holding a mirror cover in place. Detent springs extend between the frame and cover for snap opening and closing of the cover between closed and open positions. The cover includes an additional cam (95, 97) which cooperates with an electrical switch when the cover is open to provide operating power to the lamp.





MN, MW, MX, MZ, NI, NO, NZ, OM, PG, PH, PL, PT, RO, RU, SC, SD, SE, SG, SK, SL, SY, TJ, TM, TN, TR, TT, TZ, UA, UG, US, UZ, VC, VN, YU, ZA, ZM, ZW.

(84) **Designated States (regional):** ARIPO patent (BW, GH, GM, KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZM, ZW), Eurasian patent (AM, AZ, BY, KG, KZ, MD, RU, TJ, TM), European patent (AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, HU, IE, IT, LU, MC, NL, PT, RO, SE, SI, SK, TR), OAPI patent (BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG).

Published:

— with international search report

(88) **Date of publication of the international search report:**
16 December 2004

For two-letter codes and other abbreviations, refer to the "Guidance Notes on Codes and Abbreviations" appearing at the beginning of each regular issue of the PCT Gazette.

INTERNATIONAL SEARCH REPORT

International application No.

PCT/US03/37196

A. CLASSIFICATION OF SUBJECT MATTER

IPC(7) : B60Q 1/00, 1/26
US CL : 362/492

According to International Patent Classification (IPC) or to both national classification and IPC

B. FIELDS SEARCHED

Minimum documentation searched (classification system followed by classification symbols)
U.S. : 362/492, 488, 490, 548, 549, 136, 137, 177, 221, 222, 226, 274, 277, 285, 371

Documentation searched other than minimum documentation to the extent that such documents are included in the fields searched
NONE

Electronic data base consulted during the international search (name of data base and, where practicable, search terms used)
EAST

C. DOCUMENTS CONSIDERED TO BE RELEVANT

Category *	Citation of document, with indication, where appropriate, of the relevant passages	Relevant to claim No.
X	US 4,760,503 A (VANDENBERGE et al.) 26 July 1988 (26.07.1988), abstract, Fig. 3.	8, 10, 11, 12
X	US 5,117,337 A (SAKUMA) 26 May 1992 (26.05.1992), Figs. 6 and 7.	27
A	US 6,435,593 B2 (WELTER) 20 August 2002 (20.08.2002), abstract.	1-7, 9, 13-26, 28, 29
A	US 6,325,527 B1 (LEE) 4 December 2001 (04.12.2001), abstract.	1-7, 9, 13-26, 28-29

Further documents are listed in the continuation of Box C.

See patent family annex.

* Special categories of cited documents:	
"A"	document defining the general state of the art which is not considered to be of particular relevance
"E"	earlier application or patent published on or after the international filing date
"L"	document which may throw doubts on priority claim(s) or which is cited to establish the publication date of another citation or other special reason (as specified)
"O"	document referring to an oral disclosure, use, exhibition or other means
"P"	document published prior to the international filing date but later than the priority date claimed
"T"	later document published after the international filing date or priority date and not in conflict with the application but cited to understand the principle or theory underlying the invention
"X"	document of particular relevance; the claimed invention cannot be considered novel or cannot be considered to involve an inventive step when the document is taken alone
"Y"	document of particular relevance; the claimed invention cannot be considered to involve an inventive step when the document is combined with one or more other such documents, such combination being obvious to a person skilled in the art
"&"	document member of the same patent family

Date of the actual completion of the international search

30 March 2004 (30.03.2004)

Date of mailing of the international search report

05 MAY 2004

Name and mailing address of the ISA/US

Mail Stop PCT, Attn: ISA/US
Commissioner for Patents
P.O. Box 1450
Alexandria, Virginia 22313-1450

Facsimile No. (703) 305-3230

Authorized officer

Sandra O'Shea

Telephone No. (703) 308-0956